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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/631,242	08/02/2000	Hoon Chang	678-520(P9487)	8089

7590 03/11/2004
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EXAMINER

WILSON, ROBERT W

ART UNIT PAPER NUMBER

2661

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/631,242

Applicant(s)

CHANG, HOON

Examiner

Robert W Wilson

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 2661

DETAILED ACTION

1.0 The application of Hoon Chang for a "APPARATUS AND METHOD FOR RETRANSMITTING DATA ACCORDING TO RADIO LINK PROTOCOL IN MOBILE COMMUNICATION" filed 8/2/2000 requesting Foreign Priority based upon Korea 1999-31753 dated 8/2/1999 and amended on 2/24/04 has been examined. Claims 1-3 are pending.

Claim Rejections - 35 USC § 103

2.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3.0 Claims 1-3 are rejected under 35 U.S.C. 103(a) as being obvious over Tomcik (U.S.

Patent No.: 6,567,388 B1)

Referring to **Claim 1**, Tomcik (U.S. Patent No.: 6,567,388 B1) teaches: A method of requesting frame retransmission in a mobile communication system (col. 2 lines 24-58), comprising the steps of:

Storing a sequence numbers of a plurality of RLP (Radio Link Protocol) frames that are not received from a transmitter in a receiver (col 2 lines 24-58)

Transmitting a retransmission request frame including fields that indicate the sequence number from the receiver (col 2 lines 24-58)

Sequentially receiving the requested RLP frames in the order of the sequence numbers from the transmitter in the receiver (col 2 lines 24-58)

Comparing the stored sequence numbers with the sequence numbers of the received RLP frames when if the receiver fails to receive one of the requested RLP frame of a higher sequence number than the sequence number of the lost RLP frame (col 2 lines 24-58)

Tomcik does not expressly call for: a higher sequence number than the sequence number of the lost RLP frame but teaches out of order sequence number per col 2 lines 39-43

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It would be obvious to one of ordinary skill in the art at the time of the invention that the out of sequence order sequence number performs the same function as a higher sequence number.

Referring to **Claim 2**, Tomcik (U.S. Patent No.: 6,567,388 B1) teaches: A mobile communication system (col. 2 lines 24-58) comprising:

A transmitter for transmitting a plurality of RLP frames (col. 2 lines 24-58)

A receiver for receiving the plurality of RLP frames (col. 2 lines 24-58)

Wherein the receiver transmits a retransmission request frame including fields that indicate the sequence numbers of a non-received RLP frames, the transmitter sequentially transmits the requested RLP frames along with the sequence numbers of the requested RLP frames in the order of the sequence numbers to the receiver upon receipt of the retransmission request frame, and if the receiver fails to receive one of the requested RLP frames, the receiver RLP transmits a retransmission request frame for the RLP frame the receiver failed to receive upon receipt of an RLP frame of a higher sequence number than the sequence number of the lost RLP frame (col. 2 lines 24-58)

Tomcik does not expressly call for: a higher sequence number than the sequence number of the lost RLP frame but teaches out of order sequence number per col. 2 lines 39-43

It would be obvious to one of ordinary skill in the art at the time of the invention that the out of sequence order sequence number performs the same function as a higher sequence number.

Referring to **Claim 3**, Tomcik (U.S. Patent No.: 6,567,388 B1) teaches: A mobile communication system (col. 2 lines 24-58) comprising:

A transmitter for transmitting a plurality of RLP (Radio Link Protocol) frames each having a sequence number, and sequentially transmitting to a receiver requested RLP frames along with sequence numbers of a requested RLP frames in the order of the sequence numbers upon receipt of a retransmission request frame (col. 2 lines 39-43)

A receiver for receiving the plurality of RLP frames, transmitting a first retransmission request frame including fields that indicate the sequence numbers of non-received RLP frames, and transmitting a second retransmission request frame if the receiver fails to receive one of the requested RLP frames (col. 2 lines 39-43).

Tomcik does not expressly call for: a higher sequence number than the sequence number of the lost RLP frame but teaches out of order sequence number per col 2 lines 39-43

It would be obvious to one of ordinary skill in the art at the time of the invention that the out of sequence order sequence number performs the same function as a higher sequence number.

Response to Amendment

4.0 Applicant's arguments filed 2/24/04 have been fully considered but they are not persuasive.

The examiner respectfully disagrees with the applicant's argument that the reference, Tomcik, fails to teach or disclose: "an RLP frame of a higher sequence no.". The reference, Tomcik, teaches "detected when a frame with an out-of-order sequence number is received" per col. 2 lines 39-58 or "an RLP frame of a higher sequence no.". For example, if a receiver was expecting to receive a frame with sequence number 2 but received a frame with sequence number 4; the receiver received a frame with an out of order sequence number which is also an RLP frame of a higher sequence number. Consequently, it would have been obvious to one of ordinary skill in the art at the time of the invention that receiving an out of sequence number performs the same functions as receiving a higher order sequence number.

5.0 **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

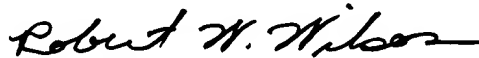
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

6.0 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 703/305-4102. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.


Robert W Wilson
Examiner
Art Unit 2661

RWW
March 2, 2004



DARGTON
PRIMARY EXAMINER